SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARAGRAPH 69, CPMAVINST 3750.60

Aer 180CT 1958

SIXTH EMDERSEMENT on CO, VMF-451 ADDENDUM to AAR ser 3-58 concerning FJ-4, BUNO 139470 accident occurring 14 May 1958, palot PECK

From: Chief, Bureau of Aeronautics To: Chief of Naval Operations (Op-57) Via: Commander, U. S. Naval Aviation Safety Center

Copy to: NAVAVSAFCEN (2) CMC (Code AAP) CINCPACELT
CG, AIRFMFPAC
CG, THIRD MAW
CO, MAG 15 00, VIF-451 COMNAVAIRPAC COMNOTS

O. L. MAUPIN By direction

FF4-1/A25 Serial: 80/ 7435

2 4 JUN 1958

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PART VII OPNAVINST 3750.6B

FIFTH ENDORSEMENT on VMF-451 AAR ser 3-58 concerning FJ-4 BUNO 139470 accident occurring 14 May 1958, pilot PECK

. Via:

From: Commander Naval Air Force, Pacific Fleet
To: Chief of Naval Operations (OP-57)
Vis: (1) Chief, Bureau of Aeronautics (MA-61)
(2) Commander, U. S. Naval Aviation Safety Center

Subj: VMF-451 AAR ser 3-58

By direction

Copy to: NAVAVSAFCEN (2)(Airmail) CMC (CODE AAP) CINCPACELT CG, AIRFMFPAC CG, 3rdMAW CO, MAG-15 CO, VMF-451

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PART VII OPNAVINSTR 3750.6B

ORIGINAL

FF13-5 11:dll 18 JUN 1958

FOURTH ENDORSEMENT on VMF-451 AAR ser 3-58 concerning FJ-4, BuNo. 139470, accident occurring 14 May 1958, pilot FECK

From: Commanding General, Aircraft, Fleet Marine Force, Pacific To: Chief of Naval Operations (Op-57)
Via: (1) Commander, Naval Air Force, Pacific Fleet
(2) Chief, Bureau of Aeronautics (Aer-512)
(3) Commander, U. S. Naval Aviation Safety Center

Subj: Major Aircraft Accident Report, case of First Lieutenant Matthew B. PECK Jr., (b) (6) 7332 USMC

CLAYTON C. JEROME

Copy to: CMC (AAP) BuAer (Aer-512) NavAvnSafCen (2) CinCPacFlt ComNavAirPac BAR, NAA, Inc, Columbus 16, Ohio BAR, WAD, Wood-Ridge, N. J. CG, 3rd MAW CO, MAG-15 CO, VMF-451

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PART VII OF OPN V INST 3750.6B

61:CEM:lda 10 JUN 1958

THIRD ENDORSEMENT on VMF-451 AAR ser 3-58 concerning FJ-4, BuNo. 139470 accident occurring 14 May 1958, pilot PECK

Commanding General, 3d Marine Aircraft Wing

To: Via:

Chief of Naval Operations (Op-57)
(1) Commanding General, Aircraft, Fleet Marine Force, Pacific

Commander, Naval Air Force, Pacific Fleet Chief, Bureau of Aeronautics (Aer-512) Commander, U. S. Naval Aviation Safety Center

VMF-451 AAR ser 3-58, forwarding of Subj:

J. A. Ennes T. G. ENNIS

Copy to: CMC (AAP) BuAer (Aer-512) ComNavAvnSafCen (2 Airmail) CinCPacFlt ComNavAirPac BAR, NAA, Inc, Columbus 16, Ohio BAR, WAD, Wood-Ridge, N. J. Naval Liaison O, Norton AFB .CO, M/G-15 CO, VMF-451

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PART VII OF OPNAV INST 3750.6B

Via:

SECOND ENDORSEMENT on VMF-451 AAR ser 3-58 concerning FJ-4, BuNo. 139470 accident occurring 14 May 1958, pilot PECK

From: Commanding Officer, Marine Aircraft Group-15 Chief of Naval Operations (OP-57) To:

- (1) Commanding General, 3d Marine Aircraft Wing (2) Commanding General, Aircraft, Fleet Marine Force, Pacific
- (3) Commander, Naval Air Force, Pacific Fleet (4) Chief, Bureau of Aeronautics (Aer-512)
- (5) Commander, U. S. Naval Aviation Safety Center

Subj: VMF-451 AAR ser 3-58, forwarding of

Copy to: CMC (AAP) Buaer (Aer-512) USNavAvnSafCen (2 Air Mail) CinCPacFlt . ComNavAirPac BAR, NAA, Inc, Columbus 16, Ohio BAR, WAD, Wood-Ridge, N. J. Naval Liaison O, Norton AFB CO, VMF-451

SPECIAL HANDLING REQUIRED IN ACCORDANCE . WITH PART VII OPNAVINST 3750.6B

S-3:JSP:cec 26 May 1958

FIRST ENDORSEMENT on VMF-451 AAR 3-58, concerning FJ-4 BuNo. 139470, accident occurring 14 May 1958, Pilot PECK

From: Commanding Officer, Marine Fighter Squadron 451

Chief of Naval Operations (Up-57) To: Via:

(1) Commanding Officer, Marine Aircraft Group 15

(2) Commanding General, 3d Marine Aircraft wing
(3) Commanding General, Aircraft, Fleet Marine Force, Pacific
(4) Commander, Naval Air Force, Pacific Fleet
(5) Chief, Bureau of Aeronautics (Aer 512)
(6) Director, U. S. Naval Aviation Safety Center

Subj: Major Aircraft Accident Report, case of First Lieutenant Matthew B. PECK Jr., (b) (6) /7332 USMC

1. Forwarded.

Acting

Copy to:

BuAer (Aer 512) CMC (Code AAP) CinCPacFit ComNavAirPac USNavAvnSafCen (2cc Air Mail) Naval Liaison Officer, Norton AFB BAR, North American Aviation Inc., Columbus 16, Ohio NOTS China Lake

U. S. NAVAL ORDIANCE TEST STATION CHINA LAKE, CALIFORNIA

IN REPLY REFER TO: 5563/CHA:bja Serial 3268 31 JULY 1958

From: Commander, U. S. Naval Ordnance Test Station
To: Commanding Officer, Marine Fighter Squadron 451
Marine Corps Air Station
El Toro, California

Subj: SIDEWINDER Target Rocket; failure to launch from FJ4 airplane 14 May 1958

Encl: (1) NOTS Memo Reg. 4062-15 dtd 23 Jun 58

(b) (5)

H. T. LOTEE By direction

Copy to: EUORD (ReW1) (ReW4) SPECIAL MANDLING REQUIRED IN ACCORDANCE WITH PARAGRAPH 69, DPNAVINGT 3750.60

U. S. NAVAL ORDNANGE TEST STATION China Lake, California 406/DJJ:1dm Reg. 4062-15 23 June 1958 MEMORANDUM From: Aerocompatibility Branch (Code 4062) Distribution Subj: SIDEWINDER Target Rocket or Aero 3A Launcher; Testing of possible malfunction of Encl: (1) Table of Firing Conditions and Results 1. A ground firing test was conducted in an attempt to cause a SIDEWINDER Target Rocket, when fired, to remain on a normally operating Aero 3A SIDE-WINDER launcher. No attempt was made to simulate the inertia and merodynamic forces imposed by a maneuvering aircraft, but changes were made to the missile bangers and to the position of the rocket when loaded to simulate (1) a hanger failure and (2) an improporty loaded rocket. Enclosure (1) is a table of the test conditions of each round fired and the results obtained. 2. The test conditions were established to simulate circumstances that had been nostulated as possible cause of the recent target-rocket-firing acci-· dent which occurred to the Marine FJ-4 over Mojave B. The first test condition, Rounds Mos. 1, 2, and 3, was employed to demonstrate that inversion of the launcher, per se, was not part of the problem. 3. The second test condition, Rounds Nos. A and 5, was employed to check a very real loading possibility in which the round is not positioned fully forward and as a result the rear detent rests on top of the missile firing button. In this circumstance, a SIDEMINDER missile could not be fired as the motor firing circuit is broken at the button, but the target rocket can be fired from this position by virtue of its pigtail firing provisions. The reason for concern in this loading circumstance is that the detent block, raised at the rear, operates the smubber release arm assembly, Post No. 55889037, which mechanically extends the forward snubbers out into the rail track. Thus it is conceivable that physical interference could exist between the missile forward hanger and the snubbers.. A. The next two test conditions, Rounds 6 through 9, simulated inflight launching conditions where prior flight managers had perhaps failed, respectively, either the aft or the forward missile hanger. The last loading condition, Round No. 10, maximized the binding of the hanger, consistent with actually being able to load the round in the launcher, by rotating the hanger to the maximum allowed by the rail around a longitudinal exist SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARAGRAPH 69, OPNAVINST 3750.60

5. No rounds failed to launch in the conditions tried. A locked detent or definite wedging of a broken hanger piece or definitely locked front snubbers would cause a launching failure, especially a cold round, but these conditions were not tosted since past tests with the SIDEWINDER motor locked in the launcher using a locked detent or stops in front of the hangers had previously been conducted and the rounds, of course, had failed to launch. A loose center band condition should not offer any difficulty since it would be pushed through by the aft hanger.

6. From the results obtained, it is concluded that no launching failure should occur from a normally operating launcher when

- a, the launcher is inverted
- b. the detent is resting on the center portion of the front hanger
- c. one of the three hanger's is failed or omitted
- d. the hangers are malaligned in any manner still permitting the loading of the rocket.

Further tests involving one or more loose or simulated failed hangers, in conjunction with simulated vertical and serodynamic side loads on the missile, are to be conducted.

(b) (6)

Round	Mtr Temp	Orientation of Launcher	Hanger Condition	Detent Condition	Snubber Condition	Flight Condition
1	70	Inverted	3 hangers normal	Normal	Normal	Mormal .
2	70	Inverted	3 hangers normal	Normal.	Normal	low and right
. 3	70 '	Inverted	Front hanger loose	Normal	Normal	Normal
, 4	70 	Upright	3 hangers normal	Aft detent on center of front hanger	Normal	Normal
-5 11.	70	Upright	3 haugers norwal.	Aft detent on center of front hanger	Normal	Normal
. 6	70	Upright	No aft hanger	Normal .	Normal	Normal
7	70	Upright	No aft hanger	Normal (Normal	Normal
8	-30	Uright	No front hanger	Normal	Normal	Lou
9	-30	Upright	No front hanger	Normal (Normal	Lov
10	70	Upright	Hingers rotated for maximum bind-	Normal /	Normal	Normal .

AIRCRAFT ACCIDENT REPORT OPNAY FORM 3750-1 (REV. 11-55) PAGE 1/

See Instructions for completion prior to filling out

OPNAV REPORT STEE-I

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Marine Fighter Squadron 451						14	May 1958	08501	3-58			
CHIEF OF NAVAL OPERATIONS (Op-57)							CLOSURES:					
6. VIA: (1) CO, Marine Aircraft Group 15							(b) (6) (3) Witness Statement (b) (6) (3) Witness Statement (b) (6)					
CG. 3d Marine Aircraft Wing								(b) (6)	*******			
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		ler. Naval A				(b) (6)						
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(if additional space is necessary, attach additional sheet(s))

AGE 2			AIRCRAF	ACCIDENT	REPORT		OPHAY RE	PORT 3750-	
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4. INSTRUMENT HE	S. LOGGED	5. NIGHT SINCE	HOURS/LA	NDINGS LOG	g€D ~	6. NIGHT-HOURS/LANDINGS LOGGED LAST 30 DAYS			
*	PAR	TII - MAIN		MATERIA	L AND FAC	ILITIES DATA			
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AGE	V FORM 3750-1 (R 3			************************	T ACCIDENT			OPNAV REPORT 3786-		
***	·····	PART	II - MAI	NTENANCE, M	ATERIAL AN	ID FACILITI	ES DATA (Cor	1'4).		
INVOLVED DESC	. D CLEARA	NCE AUTI	HORITY	h. 🗆 Ri	H. TRUNWAY			o. GEAR (Runwey)		
	b. D FLIGHT	PLANNING	INFOR	i. 🗆 w	I. WATER LANDING AREA			p. AIRCRAFT SERVICING, HAND- p. LING & DIRECTING (Field or Ship)		
	c. LANDING	AIDS (GC	A, CCA,	j. 🗆 Al	I. APPROACH ZONE			q. 🖫 CRASH AND RESCUE		
	d. [] TRAFFIC	CONTRO	L TOWE	R , k. □ E	, k END ZONE			r. SEARCH AND RESCUE		
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	1. CRUNWAY	WATCH		m. 🗆 T	m. TAXIWAY			1. ARRESTING GEAR (Currier)		
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	B. EQUIPMENT		D: DAR	RESTING GEAR			ND OVER D. RELATIVE E. APPROACH ECK READING READING AUNCHING BRIDLE AND CONFIGURATION USE			
1	J. CATAPULT/A	RRESTING	GEAR BU	LLETINS OR NO	TINS OR NOMOGRAMS USED					
35.110	J. CATAPULT/ARRESTING GEAR BULLETINS OR NOMOGRAMS USED K. THIS PORTION SHALL BE COMPLETED WHENEVER (1) A MAJOR AIRCRAFT ACCIDENT INVOLVES ARRESTING GEAR, BARRIER AND/OR BARRICADE EQUIPMENT, OR (2) AN AIRCRAFT ACCIDENT INVOLVES MALFUNCTIONING OF ARRESTING GEAR, BARRIER AND/OR BARRICADE EQUIPMENT. MINOR ACCIDENTS OR ROUTINE DAMAGE TO CABLES, WELD-									
ATA	INGS AND OTHER	DECK	RAM		NENTS NEED NOT BE REPORTED.			ACCUMU- COMMENTS		
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2. SHI	DECK PENDANT	1		DOME (P.S.I.)	RATIO	(WT. Les.)	(PSI)	months in service)		
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	BARRIER									
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PHILIPPIN	SECT ITEM		to:	ART III - RE 512)	MARKS (cont	inue on separ	ate pages if n	ocessory)		

(a) 0

PART V - THE ACCIDENT

1. At approximately 0830, on 14 May 1958, First Lieutenant Matthew B. PECK Jr., 060288/7332 took off from MCAAS Mojave on a scheduled air-to-air missile firing hop. Lt. PECK was the designated leader of a flight consisting of three other squadron pilots and an inspector pilot. The flight took off and rendezvoused without incident and then proceeded to the Mojave "HRAVO" Range (restricted area 277) as briefed. (see enclosure 7A). At approximately 0845 Lt. PECK contacted China Lake tower and received clearance for his flight to enter the range. Shortly after entering the range, Lt. PECK instructed the flight to drop back as he previously had briefed. He then nosed up approximately thirty (30) degrees above the horizon, rolled inverted, and commenced an easy pull through intending to fire his target and sidewinder missile from this attitude. About ten (10) degrees above the horizon and at an altitude of approximately 33000 feet he fired his target rocket. The rocket ignited but remained on the rails and caused the aircraft to enter a violent yaw which was followed by an uncontrollable spinning maneuver. Unable to effect recovery, Lt. PECK successfully ejected at approximately 26000 feet. The aircraft crashed at 117° 9' west and 35° 45' north with an angle of impact of approximately seventy (70) degrees. (see enclosures (7A) and (7B)).

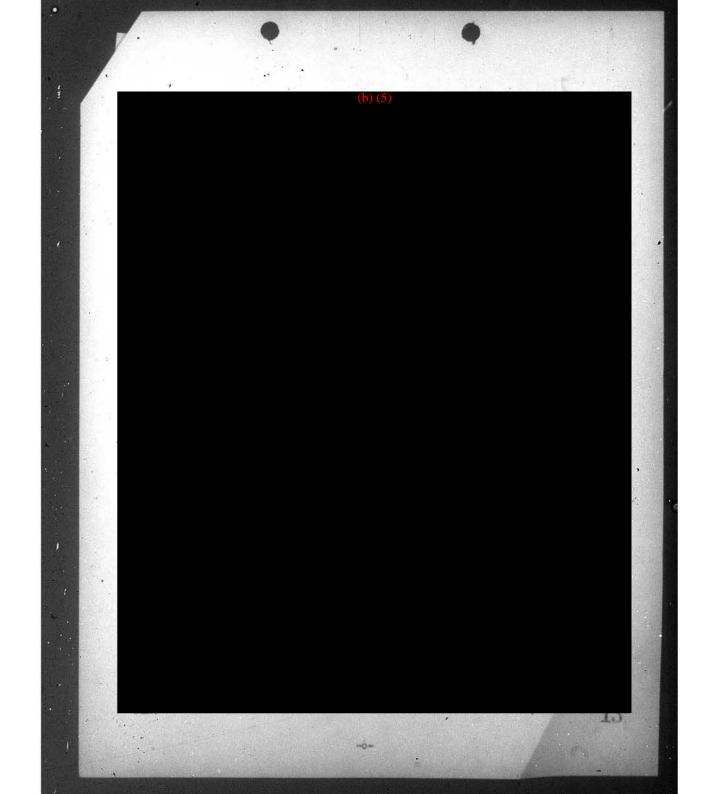
PART VI - DAMAGE TO AIRCRAFT

1. The aircraft contacted the ground with an angle of impact of approximately seventy (70) degrees and was completely demolished by the explosion and fire that followed. (see enclosures (7H) and (7C)). The beam adapter outboard (P/N 209-63012-1), Pylon Aero 3A(P/N LH-1440-511-92554558), Launcher Aero 3A(P/N 209-89 855), and the target mocket, MA-10 motor, inert head were the only parta recovered. (see enclosures (7C), (7D) and (7E)).

PART VII - THE INVESTIGATION

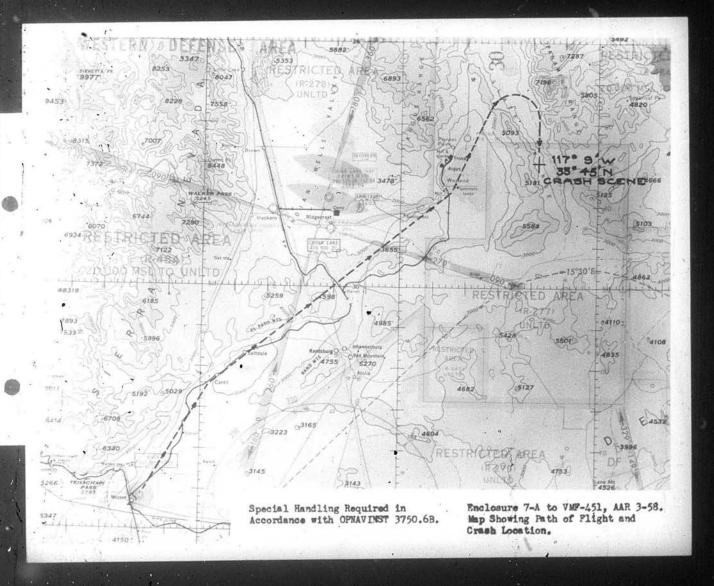
(b) (5

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The Following enclosures were withheld entirely under exemptions (b)(5) and/or (b)6) of the FOIA:

- 1-5 Pilot and witness statements.
- 6 Medical Officer's Report

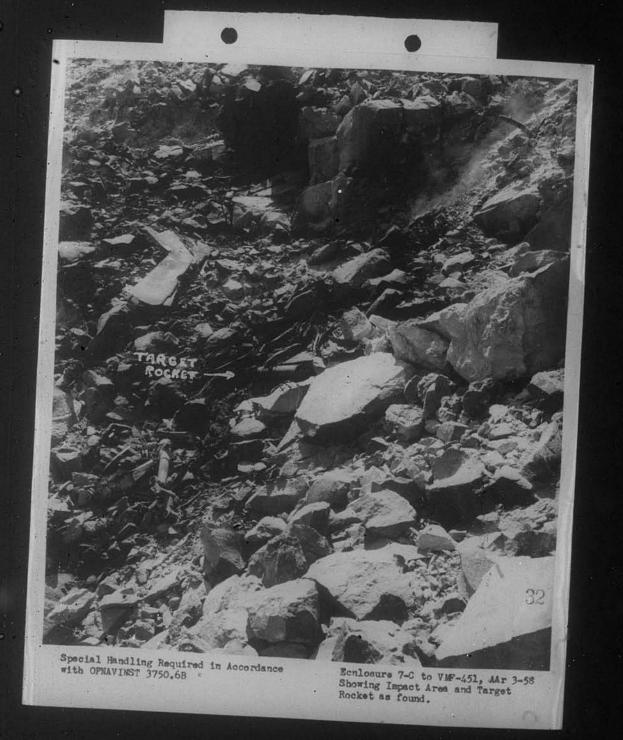




ALEVATION & POINT OF AGOOFEET IMPACT

Special Handling Required in Accordance with OPNAVINST 3750.6B

Enclosure 7-B to VMP-451, AAR 3-58 Showing Terrain in the Vicinity of the Impact Area.





Special Handling Required in Accordance with OPNAVINST 3750.6B

Enclosure 7-D to VMF-451, AAR 3-58. Showing Target Rocket in its Original Position Following Impact.

TARGET ROCKET LAUNCHER PYLON

Special Mandling Required in Accordance with OPNAVINST 3750.6B

Enclosure 7-E to VMF-451, AAR 3-58. Showing Target Rocket, Pylon, and Launcher After it was Extricated from Rubble at Impact Area.

